



# UNITED STATES BATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,936	03/01/2002	Junichi Aizawa	L9289.02136	7237
24257	7590 12/03/2004		EXAM	INER
	AVIS MILLER & M	TRAN, TUAN A		
1615 L STRE SUITE 850	EI, NW		ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			2682	6
			DATE MAILED: 12/03/2004	, 0

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summan	10/069,936	AIZAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
The MANUAL DATE of this communication and	Tuan A Tran	2682				
The MAILING DATE of this communication app Period for Reply	lears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>01 M</u>	arch 2002.					
	·					
3) Since this application is in condition for allowar	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-19 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application tity documents have been received a (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5.</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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#### **DETAILED ACTION**

### Specification

The abstract of the disclosure is objected to because there are more than 150 words. Correction is required. See MPEP § 608.01(b).

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-2, 7-9 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kohno et al. (6,763,062).

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Regarding claims 8-9, Kohno discloses a second radio communication apparatus (transmitter side of the base station) that comprises antenna controlling means 50-52 for controlling a transmission directivity to transmit/retransmit a signal in accordance with an information of a control signal transmitted from a first radio communication apparatus (receiver side of the base station), wherein the first radio communication apparatus comprises: estimating means 48, 59 for estimating a channel situation obtained when a signal is received and to output reception quality information; and directivity switching determining means 57 for determining whether to change a directivity of transmission array antenna based on the reception quality information and to transmit a control signal that indicates a change in transmission directivity, wherein the directivity switching determining means 57 orients a directivity of the transmission antenna toward waves other than a main wave when the channel situation is poor (See figs. 2, 7 and col. 5 line 27 to col. 6 line 54, col. 10 lines 3-60).

Claims 1-2, 7 and 14-17 are rejected for the same reasons as set forth in claims 8-9.

Claims 18-19 are rejected for the same reason as set forth in claims 8-9, as method.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 3-6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohno et al. (6,763,062) in view of Wong et al. (6,453,177).

Regarding claims 10-11, Kohno discloses as cited in claim 8. However, Kohno does not mention that the directivity switching determining means outputs information to widen the beam width of the transmission antenna when the channel situation is poor or to narrow the beam width of the transmission antenna when the channel situation is good. Wong teaches a wireless communication system base station that uses adaptive antenna array wherein the beam width of the transmission antenna directivity is widened or narrowed when the channel situation is poor or good respectively (See figs. 3-4 and col. 2 lines 1-14, col. 6 line 34 to col. 7 line 25, col. 8 lines 29-54). Sine both Kohno & Wong disclose the base station that uses directivity antenna array; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the Wong's teachings in controlling the beam width of the transmission antenna directivity of the Kohno's system in accordance to the channel situation (by the directivity switching determining means) for the advantage of enhancing the system performance.

Claims 3-4 are rejected for the same reasons as set forth in claims 10-11.

Regarding claim 12, Kohno & Wong disclose as cited in claim 10. Wong further discloses the beam width is changed gradually in accordance with a level of the channel situation (See fig. 4 and col. 2 lines 1-14, col. 8 lines 29-54).

Claim 5 is rejected for the same reasons as set forth in claim 12.

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Regarding claim 13, Kohno & Wong disclose as cited in claim 10. Wong further discloses a limitation is provided on changing the beam width of the transmission array antenna (See figs. 3-4 and col. 2 lines 1-14, col. 6 line 34 to col. 7 line 25, col. 8 lines 29-54).

Claim 6 is rejected for the same reasons as set forth in claim 13.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

• Miya et al. (EP 0948145); Bruckert (5,596,333); Forssen et al. (5,615,409).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tuan Tran

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PRIMARY EXAMINER